STATE OF MISSOURI

DEPARTMENT OF NATURAL RESOURCES

MISSOURI CLEAN WATER COMMISSION

MISSOURI STATE OPERATING PERMIT

In compliance with the Missouri Clean Water Law, (Chapter 644 R.S. Mo. as amended, hereinafter, the Law), and the Federal Water Pollution Control Act (Public Law 92-500, 92nd Congress) as amended,

Permit No.	MO-0111082
Owner:	3M Company
Address:	Bldg. 42-2E-27, PO Box 33331, St. Paul, MN 53133-3331
Continuing Authority:	Same as above
Address:	Same as above
Facility Name:	3M Nevada
Address:	2120 East Austin Blvd., PO Box 327, Nevada, MO 64772
Legal Description:	S ½, NE ¼, Sec. 10, T35N, R31W, Vernon County
Receiving Stream:	Tributary to Birch Branch (U)
First Classified Stream and ID:	Little Drywood Creek (P)(01325)
USGS Basin & Sub-watershed No.:	(10290104-060003)

is authorized to discharge from the facility described herein, in accordance with the effluent limitations and monitoring requirements as set forth herein:

FACILITY DESCRIPTION

Outfall #001 – Landfill - SIC #2641
Stormwater runoff/trench dewatering.
Flow is dependent upon rainfall.
Outfall #002 – Landfill - SIC #2641
Stormwater runoff.
Flow is dependent upon rainfall.
Outfalls #003 & #004 – Industrial Stormwater - SIC #2641
Flow is dependent upon rainfall.

This permit authorizes only wastewater discharges under the Missouri Clean Water Law and the National Pollutant Discharge Elimination System; it does not apply to other regulated areas. This permit may be appealed in accordance with Section 644.051.6 of the Law.

November 27, 2002
Effective Date

Stephen M. Mahfood, Director, Department of Natural Resources
Executive Secretary, Clean Water Commission

November 26, 2007
Expiration Date

Jim Hull, Director of Staff, Clean Water Commission

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

The permittee is authorized to discharge from outfall(s) with serial number(s) as specified in the application for this permit. The final effluent limitations shall become effective upon issuance and remain in effect until expiration of the permit. Such discharges shall be controlled, limited and monitored by the permittee as specified below:

OUTFALL NUMBER AND EFFLUENT PARAMETER(S)	UNITS	FINAL EFFLUENT LIMITATIONS			MONITORING REQUIREMENTS	
		DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MEASUREMENT FREQUENCY	SAMPLE TYPE
Outfalls #001 & #002						
Calcium	mg/L	*		*	once/year	grab***
Fluoride	mg/L	*		*	once/year	grab***
Total Hardness	mg/L	*		*	once/year	grab***
Barium, Total Recoverable	mg/L	*		*	once/year	grab***
Boron, Total Recoverable	mg/L	*		*	once/year	grab***
Cadmium, Total Recoverable	mg/L	*		*	once/year	grab***
Chromium, Total Recoverable	mg/L	*		*	once/year	grab***
Cobalt, Total Recoverable	mg/L	*		*	once/year	grab***
Copper, Total Recoverable	mg/L	*		*	once/year	grab***
Sodium, Total Recoverable	mg/L	*		*	once/year	grab***
Ammonia as N	mg/L	*		*	once/year	grab***
Nitrate & Nitrite as N	mg/L	*		*	once/year	grab***
Phenols, Total	mg/L	*		*	once/year	grab***
Phosphorus	mg/L	*		*	once/year	grab***
Mercury, Total Recoverable	mg/L	*		*	once/year	grab***
Arsenic, Total Recoverable	mg/L	*		*	once/year	grab***
Lead, Total Recoverable	mg/L	*		*	once/year	grab***
Selenium, Total Recoverable	mg/L	*		*	once/year	grab***
Nickel, Total Recoverable	mg/L	*		*	once/year	grab***
Silver, Total Recoverable	mg/L	*		*	once/year	grab***
Manganese, Total Recoverable	mg/L	*		*	once/year	grab***
Magnesium, Total Recoverable	mg/L	*		*	once/year	grab***
Zinc, Total Recoverable	mg/L	*		*	once/year	grab***
Total Organic Carbon	µg/L	*		*	once/year	grab***
Total Organic Halogens	µg/L	*		*	once/year	grab***

MONITORING REPORTS SHALL BE SUBMITTED ANNUALLY; THE FIRST REPORT IS DUE October 28, 2003. THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.

B. STANDARD CONDITIONS

IN ADDITION TO SPECIFIED CONDITIONS STATED HEREIN, THIS PERMIT IS SUBJECT TO THE ATTACHED Part I STANDARD CONDITIONS DATED October 1, 1980, AND HEREBY INCORPORATED AS THOUGH FULLY SET FORTH HEREIN.

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

The permittee is authorized to discharge from outfall(s) with serial number(s) as specified in the application for this permit. The final effluent limitations shall become effective upon issuance and remain in effect until expiration of the permit. Such discharges shall be controlled, limited and monitored by the permittee as specified below:

OUTFALL NUMBER AND EFFLUENT PARAMETER(S)	UNITS	FINAL EFFLUENT LIMITATIONS			MONITORING REQUIREMENTS	
		DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MEASUREMENT FREQUENCY	SAMPLE TYPE
Outfalls #001 - #004 (Note 1)						
Flow	MGD	*		*	once/quarter**	grab***
Rainfall	inches	*		*	****	****
Chemical Oxygen Demand$_5$	mg/L	120		90	once/quarter**	grab***
Settleable Solids	mL/L/hr	1.5		1.0	once/quarter**	grab***
Total Dissolved Solids	mg/L	*		*	once/quarter**	grab***
Conductivity (Specific Conductance)	umhos/cm	*		*	once/quarter**	grab***
Chloride plus Sulfates	mg/L	1000			once/quarter**	grab***
Iron	mg/L	*		*	once/quarter**	grab***
pH – Units	SU	*****		*****	once/quarter**	grab***
Oil & Grease	mg/L	15		10	once/quarter**	grab***
Chemicals stored outside currently or in past five years (Note 2)	mg/L	*		*	once/quarter**	grab***
MONITORING REPORTS SHALL BE SUBMITTED QUARTERLY; THE FIRST REPORT IS DUE April 28, 2003.						
Total Toxic Organics (Note 3)	mg/L	*		*	once/5 years	******
MONITORING REPORTS SHALL BE SUBMITTED once/5 years; THE FIRST REPORT IS DUE October 28, 2007. THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.						

B. STANDARD CONDITIONS

IN ADDITION TO SPECIFIED CONDITIONS STATED HEREIN, THIS PERMIT IS SUBJECT TO THE ATTACHED Part I STANDARD CONDITIONS DATED October 1, 1980, AND HEREBY INCORPORATED AS THOUGH FULLY SET FORTH HEREIN.

MO 780-0010 (8/91)

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)

* Monitoring requirement only.
** Sample once per quarter in the months of March, June, September & December.
*** One grab sample taken within the first hour of a storm water runoff event.
**** The total rainfall within 24 hours preceding the sampling event shall be recorded.
***** pH is measured in pH units and is not to be averaged. The pH is limited to the range of 6.0-9.0 pH units.
****** One flow – weighted composite sample must be collected and analyses submitted during the first year after permit issuance. Sample can be collected using either automatic sampling equipment or by manually collecting and combining a minimum of eight equal volume grab samples collected over equal time intervals. Sample can be collected during either the entire runoff event (which may be less than 3 hours) or during at least the first 3 hours of runoff: total period not to exceed 24 hours.

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)

Note 1 – Samples shall be collected from the discharge resulting from a storm event that is greater than 0.1 inch and at least 72 hours from the previously measurable (greater than 0.1 inch rainfall) storm event. Where feasible, the variance in the duration of the event and the total rainfall of the event should not exceed 50 percent from the average or median rainfall event in the area.

Note 2 – Other soluble bulk materials that are not listed in 40 CFR 122 Appendix D which are currently or have been stored or disposed of outside in the last 5 years in open or unsecured containers, loaded or unloaded, or treated and exposed to stormwater should be sampled. A secure container shall be deemed to be a container with a lid which has never been opened since it was originally sealed.

Note 3 – See Total Toxic Organics page.

C. SPECIAL CONDITIONS

Note: These requirements do not supersede nor remove liability for compliance with county and other local ordinances.

1. This permit may be reopened and modified, or alternatively revoked and reissued, to:
   (a) Comply with any applicable effluent standard or limitation issued or approved under Sections 301(b)(2)(C) and (D), 304(b)(2), and 307(a) (2) of the Clean Water Act, if the effluent standard or limitation so issued or approved:
      (1) contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or
      (2) controls any pollutant not limited in the permit.
   (b) Incorporate new or modified effluent limitations or other conditions, if the result of a waste load allocation study, toxicity test or other information indicates changes are necessary to assure compliance with Missouri's Water Quality Standards.
   (c) Incorporate new or modified effluent limitations or other conditions if, as the result of a watershed analysis, a Total Maximum Daily Load (TMDL) limitation is developed for the receiving waters which are currently included in Missouri's list of waters of the state not fully achieving the state's water quality standards, also called the 303(d) list.

   The permit as modified or reissued under this paragraph shall also contain any other requirements of the Clean Water Act then applicable.

2. All outfalls must be clearly marked in the field.

3. Changes in Discharges of Toxic Substances

   The permittee shall notify the Director as soon as it knows or has reason to believe:
   (a) That any activity has occurred or will occur which would result in the discharge of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels:"
      (1) One hundred micrograms per liter (100 µg/L);
      (2) Two hundred micrograms per liter (200 µg/L) for acrolein and acrylonitrile; five hundred micrograms per liter (500 µg/L) for 2,5 dinitrophenol and for 2-methyl-4, 6-dinitrophenol; and one milligram per liter (1 mg/L) for antimony;
      (3) Five (5) times the maximum concentration value reported for the pollutant in the permit application;
      (4) The level established in Part A of the permit by the Director.
   (b) That they have begun or expect to begin to use or manufacture as an intermediate or final product or byproduct any toxic pollutant, which was not reported in the permit application.

C. SPECIAL CONDITIONS (continued)

4. Report as no-discharge when a discharge does not occur during the report period.

5. General Criteria. The following water quality criteria shall be applicable to all waters of the state at all times including mixing zones. No water contaminant, by itself or in combination with other substances, shall prevent the waters of the state from meeting the following conditions:
   (a) Waters shall be free from substances in sufficient amounts to cause the formation of putrescent, unsightly or harmful bottom deposits or prevent full maintenance of beneficial uses;
   (b) Waters shall be free from oil, scum and floating debris in sufficient amounts to be unsightly or prevent full maintenance of beneficial uses;
   (c) Waters shall be free from substances in sufficient amounts to cause unsightly color or turbidity, offensive odor or prevent full maintenance of beneficial uses;
   (d) Waters shall be free from substances or conditions in sufficient amounts to result in toxicity to human, animal or aquatic life;
   (e) There shall be no significant human health hazard from incidental contact with the water;
   (f) There shall be no acute toxicity to livestock or wildlife watering;
   (g) Waters shall be free from physical, chemical or hydrologic changes that would impair the natural biological community;
   (h) Waters shall be free from used tires, car bodies, appliances, demolition debris, used vehicles or equipment and solid waste as defined in Missouri's Solid Waste Law, section 260.200, RSMo, except as the use of such materials is specifically permitted pursuant to section 260.200-260.247.

6. Outfall #001 and trench dewatering shall be monitored at the railroad spur culvert at the southeast corner of the permitted landfill area (SW ¼, SE ¼, NE ¼, Sec. 10, T35N, R31W, Vernon County).

7. Outfall #002 shall be monitored at the discharge point on the west boundary of the permitted landfill area (NW ¼, SW ¼, NE ¼, Sec. 10, T35N, R31W, Vernon County). This monitoring point shall be located by a permanent and easily identifiable marker.

8. All leachate generated by the sanitary landfill shall be controlled on-site and not be allowed to discharge off the sanitary landfill or into the waters of the state.

9. The discharge shall not cause bottom deposits, unsightly color or turbidity, or a measurable increase in Settleable Solids in the receiving streams.

10. All leachate shall be handled in accordance with the Solid Waste Disposal Area Operating Permit, Report of Approval of Plans and Specifications (with conditions) so that there is no discharge or runoff of leachate.

11. All fueling facilities present on the site shall adhere to applicable federal and state regulations concerning underground storage, above ground storage, and dispensers, including spill prevention, control and counter measures.

12. Substances, regulated by federal law under the Resources Conservation and Recovery Act (RCRA) and Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), that are transported, stored, or used for maintenance, cleaning or repair, shall be managed according to RCRA and CERCLA.

C. SPECIAL CONDITIONS (continued)

13. Permittee shall adhere to the following Best Management Practices:

    a. Prevent the spillage or loss of fluids, oil, grease, fuel, etc. from vehicle maintenance, equipment cleaning, or warehousing activities and thereby prevent the contamination of storm water from these substances.
    b. Provide collection facilities and arrange for proper disposal of waste products including but not limited to petroleum waste products, and solvents.
    c. Store all paint, solvents, petroleum products and petroleum waste products (except fuels), and storage containers (such as drums, cans, or cartons) so that these materials are not exposed to storm water or provide other prescribed BMP's such as plastic lids and/or portable spill pans to prevent the commingling of storm water with container contents. Commingled water may not be discharged under this permit. Provide spill prevention, control, and/or management sufficient to prevent any spills of these pollutants from entering waters of the state. Any containment system used to implement this requirement shall be constructed of materials compatible with the substances contained and shall also prevent the contamination of groundwater.
    d. Provide good housekeeping practices on the site to keep trash from entry into waters of the state.
    e. Designate an individual as responsible for environmental matters. Provide for inspection by facility staff, weekly, of any structures that function to prevent pollution from storm water or to remove pollutants from storm water and of the facility in general to ensure that any Best Management Practices are continually implemented and effective. Records of inspections must be kept onsite and made available to DNR upon request.
    f. Train all involved personnel in material handling and storage, and housekeeping of maintenance areas. Proof of training shall be submitted on request.

14. Reporting of Effluent Violations

    If any of the sampling results from any of the outfalls show any violation of the permit discharge limitations, written notification shall be made to the Department of Natural Resources within five (5) days of notification of analytical results. Notification shall indicate the date(s) of sample collection, the analytical results, and permit number, and shall include a statement concerning the revisions or modifications in management practices that are being implemented to address the violation of the limitations that occurred.

    After a violation has been reported, a sample of storm water runoff resulting from the next rainfall greater than 0.1 inches shall be collected at outfall(s) for which the violation occurred. Analytical results of this sample shall be submitted in writing to the Department of Natural Resources (this paragraph supersedes Part I, Section B: 2.A. Noncompliance Notification).

15. Records Retention and Reporting

    Monitoring reports shall be submitted within 28 days after the end of each quarter. All sampling data shall be maintained by the permittee for a period of five (5) years and shall be supplied to the Department of Natural Resources upon written request (supersedes Part I. Section A: 7. Records Retention). A copy of all of the sampling data must be submitted with an application for reissuance of this permit.

Total Toxic Organics (Note 3)

Acenaphthene
Acrolein
Acrylonitrile
Benzene
Benzidine
Carbon Tetrachloride (tetrachloromethane)
Chlorobenzene
1,2,4-trichlorobenzene
Hexachlorobenzene
1,2-dichloroethane
1,1,1-trichloroethane
Hexachloroethane
1,1-dichloroethane
1,1,2-trichloroethane
1,1,2,2-tetrachloroethane
Chloroethane
Bis (2-chloroethyl) ether
2-chloroethyl vinyl ether
N-nitrosodi-n-propylamine
Pentachlorophenol
Phenol
Bis (2-ethylhexyl) phthalate
Butyl benzyl phthalate
(dibenzo(a,h)anthracene)
Di-n-butyl phthalate

Di-n-octyl phthalate
Diethyl phthalate
Dimethyl phthalate
1,2-benzanthracene (benzo(a)anthracene)
Benzo(a)pyrene (3,4-benzopyrene)
3,4-benzofluoranthene (benzo(b)fluoranthene)
11,12-benzofluoranthene (benzo(k)fluoranthene)
Chrysene
metabolites)
Anthracene
1,12-benzoperylene (benzo(ghi)perylene)
Fluorene
2-chloronaphthalene
2,4,6-trichlorophenol
Parachlorometa cresol
Chloroform (trichloromethane)
2-chlorophenol
1,2-dichlorobenzene
1,3-dichlorobenzene
hexachlorocyclohexane)
1,4-dichorobenzene
3,3-dichlorobenzidine
1,1-dichloroethylene
1,2-trans-dichloroethylene
2,4-dichlorophenol
1,2-dichloropropane (1,3-dichloropropane)
2,4-dimethylphenol
2,4-dinitrotoluene
2,6-dinitrotoluene
1,2-diphenylhydrazine
Ethylbenzene
Fluoranthene
4-chlorophenyl phenyl ether
4-bromophenyl phenyl ether
Bis (2-chloroisopropyl) ether
Bis (2-chloroethoxy) methane
Methylene Chloride (dichloromethane)
Methyl Chloride (chloromethane)
Methyl bromide (bromomethane)
Bromoform (tribromomethane)
Dichlorobromomethane
Chlorodibromemethane
Hexachlorobutadiene
Hexachlorocyclopentadiene
Isophorone
Naphthalene
Nitrobenzene
2-nitrophenol
4-nitrophenol
2,4-dinitrophenol
4,6-dintro-o-cresol
N-nitrosodimethylamine
N-nitrosodiphenylamine
Phenanthrene
1,2,5,6-dibenzanthracene

Indeno (1,2,3-cd) pyrene
(2,3-o-phenylene pyrene)
Pyrene
Tetrachloroethylene
Toluene
Trichloroethylene
Vinyl Chloride (chloroethylene)
Aldrin
Dieldrin
Chlordane (technical mixture and

4,4-DDT
4,4-DDE (p,p-DDX)
4,4-DDD (p,p-TDE)
Alpha-endosulfan
Beta-endosulfan
Endosulfan sulfate
Endrin
Endrin aldehyde
Heptachlor
Heptachlor epoxide (BHC

Alpha-BHC
Beta-BHC
Gamma-BHC
Delta-BHC (PCB polychlorinated biphenyls)
PCB-1242 (Arochlor 1242)
PCB-1254 (Arochlor 1254)
PCB-1221 (Arochlor 1221)
PCB-1232 (Arochlor 1232)
PCB-1248 (Arochlor 1248)
PCB-1260 (Arochlor 1260)
PCB-1016 (Arochlor 1016)
Toxaphene